## DAY OF ARCHAEOLOGY (MEETINGS)

July 29, 2011 Graeme Earl Archaeological Prospection, Augmented Reality, Day of Archaeology, Day of Archaeology 2011, Digital Archaeology, Finds, Maritime Archaeology, Science, Survey Anthropology, archaeologist, Archaeology, Geographic information system, geophysics, Imaging, IPhone, Italy, laser, MIT, Next Magazine, Pattie Maes, pilot systems, port of Imperial Rome, Pranav Mistry, researcher, Rome, southampton, Tom Frankland, Turkey, United Kingdom, www.patina.ac.uk, www.portusproject.org

Today is going to be spent pretty much inside, pretty much in Southampton, and pretty much in meetings, pretty much as usual. Still, the stuff is pretty interesting, at least as far as an archaeologist obsessed with computation and old things in sunny places thinks.

Today started with a couple of hours of editing. We have been working for a few years in the field of **Reflectance Transformation Imaging**. Last year the AHRC funded us to develop some new RTI systems and also to spread the word about the technology, particularly amongst archaeologists and experts in the study of ancient documents. This has been enormous fun. But I can start with a negative: the technology has its limitations – there is good experimental research demonstrating that other methods can be more accurate at the very fine level. But the considerable positives are – it is quick to do, can be very cheap, and definitely does the job if what you want to do is explore the subtle surface details of an object. If you want to measure to a micron, go elsewhere (and we have been – mostly to mu-Vis). But otherwise, grab a camera, a torch or flash gun, and a shiny ball (snooker balls work well) and get imaging. So, you'll see from the RTISAD web page that we have been recording all sorts of objects with a load of interesting people. Whilst the project is winding down – I'm editing the report whilst writing this  $\bigcirc$  – we are really keen to build new collaborations so please get in touch.

Next up I have a meeting with Les Carr in Electronics and Computer Science. I am involved in a few projects with Les and lots of others here at Southampton to identify ways for us in the institution to manage our research data. Most recently we have built a couple of pilot systems in Sharepoint and EPrints and also trialled some tools to make deposit of data an easy process for researchers. The bottom line is that we need to make it even easier for researchers to look after their data, not only for fear of the disaster of losing it but also because it is our ethical and increasingly our legal responsibility. There are a lot of institutional and professional practice issues here, as well as more pragmatic stuff: its so much easier to keep your files in a bunch on the hard drive than beautifully ordered and attributed somewhere safe and central. So, for the last year funded by the JISC we have looked at research practice and policy within the institution, including talking to a lot of our archaeologists, and seeing how in the end we can join up data management here with the aspiration of also making deposit to the ADS easier and even more ingrained in researcher practice.

For lunch it is a supervision with Tom Frankland, a PhD student here working on the RCUK Digital Economy www.patina.ac.uk project. Tom has been busy on fieldwork in Italy and in the UK examining extant fieldwork practice and developing some interventions, particularly focussed on hierarchies and issues surrounding collaboration on site. There has been loads of work in the area of digital data capture on archaeological sites and we want to explore the impact of this on practice and the wider discipline, and also propose and consider the implications of some novel technologies. For a starting point on where we are coming from look at the cool work of Pattie Maes and Pranav Mistry at MIT on SixthSense.

Afternoon in my calendar is free so at the moment that means more RTI report editing and a bit of work on Science and Heritage PARNASSUS. This project is looking at environmental effects and adaptation measures needed for the protection of cultural heritage from climate change impact. We have been involved in some interesting survey work and also research into archaeological indicators for adaptations to climate change. Open on my laptop though is the policy document for data exchange and documentation. The project has a lot of partners gathering complementary but quite different information in the next few months so as ever the issue is thinking about how best to look after it and how to let one end of the data talk to the other.

Last part of today is timetabled for reviewing this month's progress on the www.portusproject.org . We have been working at the port of Imperial Rome for the last decade or so and recently got funding from the AHRC for three years of analysis, limited fieldwork and publication. This has a strong digital component including building a succession of structural and visual computer graphic models of the various buildings, using information from geophysics, laser scanning, photogrammetry and so on. Thanks also to L-P Archaeology and their ARK  $\bigcirc$  So, with more fieldwork at Catalhoyuk in Turkey coming up really soon, the iPhone pinging, and a nagging doubt that the car still won't be fixed tonight it is time to stop writing  $\bigcirc$  Day of Archaeology = top idea. Weekend looking like Beach + Rain.